TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

December 10, 2003

TO: Internal File

FROM: Priscilla Burton, Senior Reclamation Specialist/ Team Lead

RE: Abatement of NOV N03-39-1-1, Consolidation Coal Company, Emery Deep

Mine, C/015/0015, Task # 1762.

SUMMARY:

The 4th East Portal development is in Section 27, T. 22 S. R. 6 E. Salt Lake Meridian. Most of the bonded acreage is under surface ownership of Consol Energy, Inc (see Plates I-1). This submittal (first received September 12, 2003 and resubmitted on October 31, 2003) describes the engineering controls and other measures to be implemented at the 4th East portal to abate NOV 03-39-1-1, including updates to text and plates for the addition of 1.5 acres to the bonded area, and Appendix X.C-3.

The Permittee has indicated that Exhibit D of the Reclamation Agreement lists an incorrect bonded acreage (248.5 acres). The Permittee is in the process of correcting Exhibit D to reflect the Potential Surface Operations Area (289.6 acres) acreage as shown in Table III-2 of the MRP.

The Permittee has not adequately responded to the issue of objectively evaluating the success of the Phase I controls. In addition, the Permittee must include in the text of the MRP a commitment to implement the dust control plan as outlined in the Norwest report (Appendix X.C-3) and to implement Phase II as described in the Norwest report if objective evaluations of the Phase I controls indicate Phase I is unsuccessful in controlling the off-site deposition of fugitive coal fines.

The Division has been in communication with the Division of Air Quality concerning the implementation of objective measures of success of Phase I. Several suggestions are offered to the Permittee.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

Ownership and control information (Chapter I, Page 6 and Appendix I-1) has been updated with this application. The Emery Mine is wholly owned by Consol Energy, Inc. There are nineteen sister companies also owned by Consol Energy Inc. Consol Energy is owned by Rheinbraun AG of Germany and publically held stock. Rheinbraun AG is owned by RWE AG of Germany. Current information on all the office holders in the aforementioned companies and employer identification numbers are found in Appendix I-1.

All permits held by the associated companies are listed in Chapter I, Appendix I-3. Permits are listed for the following states: Virginia, Ohio, Kentucky, West Virginia, Pennsylvania, Illinois, North Dakota, New Mexico, Tennessee, and Wyoming.

The applicant is listed as Consolidation Coal Company; Pittsburgh, PA. (The Sessor, Illinois office is no longer referenced.) The Resident Agent is listed as CT Corporation System; Salt Lake City, UT.

Findings:

The information provided meets the regulatory requirements for Identification of Interests.

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

The right of entry is established in the MRP Appendix I-2 and Plate I-1. The owners of record are listed in order of Section, Township and Range. Documents supporting the right of Entry for surface activities for the road and monitoring facilities north of the topsoil and subsoil

stockpiles on land owned by Glendon E. Johnson and the Right of Entry for a portion of the main mine facilities shown as disturbance on land owned by M. Robertson have been identified in Appendix I-2.

Findings:

The information provided in the MRP and in the Exhibit D of the Reclamation Agreement is adequate to establish Right of Entry.

RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

Analysis:

The right of entry is established in the MRP Appendix I-2 and Plate I-1. The owners of record are listed in order of Section, Township and Range. Documents supporting the right of Entry for surface activities for the road and monitoring facilities north of the topsoil and subsoil stockpiles on land owned by Glendon E. Johnson and the Right of Entry for a portion of the main mine facilities shown as disturbance on land owned by M. Robertson have been identified in Appendix I-2.

Findings:

The information provided in the MRP and in the Exhibit D of the Reclamation Agreement is adequate to establish Right of Entry.

LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

Analysis:

The County encroachment permit #200331 dated September 16, 2003 was enclosed with the application. The Permittee should instruct the Division as to where to place this information in the MRP.

The Planning and Zoning Commission meeting in Green River on September 10, 2003 included the following agenda item: "6. Consol Conditional Use Permit Action Item"

(construction on County road 915 at the Emery Deep Mine site as described in this amendment). A copy of the advertisement for the public notice of the road construction and mining operation within 100 feet of the public road was enclosed with the application. The notice appeared on October 14, 2003. The Division has not received any comments from the public concerning this activity.

Findings:

The information provided meets the requirements of the Regulations.

PERMIT TERM

Regulatory References: 30 CFR 778.17; R645-301-116.

Analysis:

The permit was issued, effective January 8, 2001 and will expire in January of 2006. According to the Administrative Overview the permit was issued for 5,180 acres. However the MRP relates that the Emery Deep Mine permit area is 5,060 acres (Chap IV p 1). This change occurred as part of Amendment 95B and was incorporated in December 1997. The 120 acres deleted from the permit is a result of a lease relinquishment in the southwest corner of the permit area and subsequent revised R2P2. The area removed from the permit forms an upside-down "L" shape in the southwest corner of the permit boundary (personal communication with John Gefferth and Tim Kirschbaum, October 10, 2003).

Findings:

The information provided meets the requirements of the Regulations.

PUBLIC NOTICE AND COMMENT

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

An affadavit of publication for the legal notice concerning the construction along the County Road and plans for operations within 100 feet of the County Road has been enclosed with the application. The Permittee should instruct the Division as to where to place this information in the MRP.

Findings:

The information provided is adequate for the purposes of the Regulations.

REPORTING OF TECHNICAL DATA

Regulatory Reference: 30 CFR 777.13; R645-301-130.

Analysis:

Dr. Patrick Collins of Mt. Nebo Scientific, Inc. evaluated the 1.5-acre area east of the 4th east portal in the spring of 2003(Appendix VIII 3).

Montgomery Archaeological Consultants surveyed 40 acres east of the 4th east portal in 2003.

Norwest Corporation developed the CONSOL Energy: Fugitive Dust Control Plan for the 4^{th} east portal area of the Emery Mine. The qualifications of the Norwest Corporation accompany the dust control plan.

Findings:

The information provided in the application meets the requirements for Reporting of Technical Data.

MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Analysis:

Maps accompanying the application include the County Road 907 that was completed in 2002.

Findings:

The information provided in the application meets the outlined in the Regulations for maps.

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

Analysis:

The permit area is 5,060 acres. The Permittee will add 1.5 acres to the permit area of which 1.0 acre will be disturbed. Plate III-5, 4th East Portal Site Pre & Postmining Topography Plane View shows the pre-disturbance contours of the 4th East Portal site. The map is adequate to show the addition of the 1.5 acres at the 4th East Portal site.

Chapter III, page 2, Table III-2 lists the Existing and Future Surface Disturbance Acres at the Emery Mine. This table shows that the area at the 4th East Portal has increased by 1.00 acre to 16.0 acres; and that there will be a 0.5 acre increase in the Proposed Near Future Disturbance Area, bringing its total to 86.2 acres. The potential surface operations area is listed as 289.6 acres. The total existing and future disturbance areas are listed as 442.5 acres. The location of these areas are shown on Plates III-1 through III-4A. (Plates III-2 and III-3 could not be found in the MRP filed in the Division's SLC Public Information Center, but are available at the Price field Office copy of the MRP.)

The Division understands that Exhibit D showing 248.5 bonded acres within the permit area is in error and will be corrected to equal the Potential Surface Operations Area (289.6 acres) identified in Table III-2. The Division calculates from Table III-2 that there currently area 66.7 acres of disturbance currently at the Emery Mine. However, The Division is uncertain as to the location of the 86.2 acres of Proposed Near Future Disturbance Area.

The Division will re-evaluate the potential size of the Emery Mine disturbed area after the reclamation investigation described on page 4a, Chapter III is completed. (See discussion under Operations Vegetation).

Findings:

The information provided in application is requires clarification. Prior to approval, the Permittee must provide the following information, in accordance with:

R645-301-142, A revised Exhibit D showing the bonded area equivalent to the 289.6 acre Potential Surface Operations Area detailed in Table III-2 and also showing the

86.2 acres of Proposed Near Disturbance Area detailed in Table III-2. (Plates III-1 through III-4A are not labeled with these areas as mentioned on page 1 of Chapter III).

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.12; R645-301-411.

Analysis:

The entire Part A of Chap X has been relocated to DOGM's confidential files (Task #1761).

Findings:

Information provided in the application meets the minimum Historic and Archeological Resource Information of the Environmental Resource Information requirements.

CLIMATOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.18; R645-301-724.

Analysis:

Climatological information is provided in Chapter X Part B of the MRP. The Permittee installed a weather station at the main Emery Mine facilities and initial data were anticipated by January 2003 (Chap. X, Part B, page 5). This weather station collects rainfall, snowfall and record wind speed and direction as well as barometric pressure and temperature. The application includes raw data collected from May 2003 through October 2003.

The Division analyzed the raw data and found that the wind speeds at the site usually fall between 0-5 mph with speeds of up to 10 mph frequently occurring. Wind speeds higher than 10 mph occurred only 12 times in the 6 month period of recording. Wind speeds of 35 mph never occurred. This site specific information has a direct bearing on the 35 mph wind speed indicated as the trigger for the water cannons. See further discussion under Support Facilities and Installations.

Findings:

The information provided meets the minimum requirements for Climatological Information.

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.20(c); 30 CFR 823; R645-301-220; R645-301-411.

Analysis:

Appendix VII-3 summarizes the information known about the 4th East Portal site from the 1981 survey conducted by James P. Walsh & Associates, Inc. of Boulder Colorado.

Addendum 1 to Appendix VII-3 documents a 4th East Portal site survey conducted on May 31, 2003 by Mr. James Nyenhuis, Certified Professional Soil Scientist. This survey revised the original soils map, Plate VII-1, for the 4th East Portal Area. The revised map showed less rockland and larger areas covered by Castle Valley soils (now called Hideout Series). The map also included areas of Montwell series soils and Begay series soils.

This submittal provides Appendix VII-4, Letter from Mt. Nebo Consultants – Append 1.45 Ac Area to 4th East Portal Area. The Appendix VII-4 describes Mr. Nyenhuis' March 13, 2003 site visit to survey and map the soils eastward to the County Road. (Note: the revised soil map contains soil series names that differ slightly from those in the consultant's letter of March 26, 2003.)

The following soil series were mapped by Mr. Nyenhuis:

Hideout Soil Series = Loamy, mixed, superactive, calcareous, mesic Lithic Ustic Torriorthents; Montwel Soil Series = Fine-loamy, mixed, superactive, calcareous, mesic Typic Torriorthents; Begay Soil Series = Coarse-loamy, mixed, superactive, mesic Ustic Haplocambids; Persayo Soil Series = Loamy, mixed, calcareous, mesic, shallow Typic Torriorthents; Chipeta Soil Series = Clayey, mixed, active, calcareous, mesic, shallow Typic Torriorthents.

The area of boundary extension is dominated by Castle Valley soils, but includes the Persayo Series and a pocket of Montwel Series (App VII-4 Soils Map). [The Castle Valley series has been renamed Hideout by the Natural Resources Conservation Service (NRCS).] Appendix C of Appendix VII-3 describes the Hideout and Persayo Series.

HIDEOUT SERIES: Depth of the surface horizon is between 2 and 4 inches. Rock is encountered between six and twenty inches at the 4th East Portal. Specific depths to bedrock were recorded on the Soils Map, Addendum 1 to Appendix VII-3.

PERSAYO SERIES: A four inch topsoil layer is underlain by an eleven inch C layer. Calcareous weathered shale and siltstone is expected at fourteen inches. Coarse fragments are

range from 0 - 15 percent. These soils are dry in all parts of the moisture control section for more than three-fourths of the time that the soil temperature is above 41 degrees F. Peak periods of precipitation occur during late summer.

MONTWEL SERIES: This is a deep soil for the mine site. The two inch surface horizon is underlain by a 34 inches of C horizon soil. Fractured shale is expected at three feet (pages C-11 through C-13 of Appendix C of Appendix VII). The Montwel series soil describes the moisture as follows: "Soil moisture falls evenly through the year with a slight increase in the late summer and fall."

These shallow soils are particularly susceptible to the extremes of temperature imposed by coal fine accumulations.

Findings:

The information provided meets the minimum requirements for Environmental Resource Soils

LAND-USE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.22; R645-301-411.

Analysis:

This submittal proposes adds an additional 1.5 acres of rangeland to the permit area. The 1.5 acres falls under the category of "semi-desert shallow loam range site" described on page 3 of Chapter X, Part D.

Findings:

The information provided meets the requirements of the Regulations.

ALLUVIAL VALLEY FLOORS

Regulatory Reference: 30 CFR 785.19; 30 CFR 822; R645-302-320.

Analysis:

Alluvial Valley Floor Determination

The 1.5 acres to be added to the permit area falls in Section 27 of T22S, R6E in the headwaters of Christiansen Wash.

Chapter XI of the MRP details the Permittee's analysis of the existence of alluvial valley floors (AVF) within the permit boundary (Chap XI, page 2). The study indicates that the two soils of agricultural importance are the Ravola loam and the Penoyer loam, both with 1-3% slopes (Chap XI, page 20). The study further indicates that Christiansen Wash is so incised as to be useless for flood irrigation and that Christiansen Wash receives its flow predominantly from diverted agricultural return flows from Muddy Creek (Chap XI, page 6).

The conclusion reached earlier by the Division that AVF's do not exist along Christiansen Wash remains unchanged (February 25, 1985, Technical Analysis, p 28). In the same document the Division concluded that there were AVF's in areas I and II shown on Plate XI-1

Findings:

The Division determined in 1985 that an AVF exists in Sections 19 and 30 T. 22 S. R. 6 E. Salt Lake Meridian. There is not an AVF in the NE1/4 of Section 27, T. 22 S. R. 6 E. Salt Lake Meridian, where the 4th East Portals are located.

PRIME FARMLAND

Regulatory Reference: 30 CFR 785.16, 823; R645-301-221, -302-270.

Analysis:

The area has shallow soils without irrigation and could not support farming. The addition of this 1.5 acres does not change the Division's assessment of the existence of prime farmlands within the permit area in Sections 20, 22, 29, 30 and 31 of T22S, R6E (February 25, 1985, Technical Analysis, p 41). These locations were shown on Plate 8-3 of the 1981 permit application. Plate 8-3 showed the 4th East Portal location as being Wildlife and Grazing with pasture land immediately north of the disturbed area. Plate 8-3 has been superceded by Plate VIII-1.

Findings:

The Division finds that there are prime farmlands within the permit area, but not within the area of 4th East Portal development, NE1/4 of Section 27, T. 22 S. R. 6 E. Salt Lake Meridian. The information provided meets the requirements of the regulations for the 1.5 acre addition to the permit area.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Archeological Site Maps

Plate X-A-1 shows all cultural sites near the Emery Mine. This plate is located in DOGM's confidential files.

Findings:

The information provided meets the requirements of the Regulations.

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

As previously determined in telephone conference communication with the Permittee on October 8, 2003 and written in the TA dated October 10, 2003, the method for measurement of the success of Phase 1 must be presented in the permit application as well as a description of the measures to be employed in Phase II. A commitment to employ Phase II measures, should Phase 1 be unsuccessful, must also be stated in the plan. Such a statement is found attached to the cover letter in the "Responses to DOGM Technicle [sic] Analysis of Consol Emery Mine Ammendment [sic] Dated 9/12/2003" (hereafter referred to as "Responses to DOGM") and as a statement in the consultant's report (Appendix X.C-3), but a commitment of this magnitude must be written into the text of the operation plan of the MRP.

From the cover letter "Responses to DOGM..." attachment, the Division understands that Phase II will involve conversion of water sprays to a dust suppressant system at the three water spray locations, namely the crusher inlet, the crusher outlet and the stacker discharge. Supporting equipment to be installed in Phase II will be the dust suppressant storage tank, heated equipment enclosure, piping, wiring, etc.

The Permittee must install some type of measuring system to track coal fines. This system may include coal fine collection boxes to measure changes in the amount of fugitive fines and dust that leaves the permit area. Miniature Random Air Monitoring (mini-RAMS) devices for the collection and analysis of Total Suspended Solids would be the best technology available for this purpose (Division consultation with the Division of Air Quality 12/04/2003). These devices should be placed up wind and down wind of the coal stockpile to be most effective. Such devices give accurate, objective information about the dust generated at the site.

The Division must determine whether abatement measures are adequate to protect vegetation and wildlife off site. Without coal operations or the coal stockpile, it will be difficult to determine the effectiveness of the abatement strategies. The Permittee should establish baseline conditions for the existing level of coal fines east of the county road, outside the permit area. The Division will not consider the efficacy of the abatement strategies until:

- Coal operations are up to the capacity prior to the closing of operations at the 4th east portal in summer/fall 2003.
- Coal stockpile is built up to a size similar to the size that existed prior to CONSOL relocating the coal pile in the summer/fall of 2003.

Findings:

The information provided in the amendment is not adequate to meet the minimum requirements of the Regulations. Prior to approval the Permittee will provide the following in accordance with:

The information provided in the amendment is not adequate to meet the minimum requirements of the Regulations. Prior to approval the Permittee will provide the following in accordance with:

R645-301-526.222, R645-301-528, and R645-301-244.100, (1) Provide in the Mining and Reclamation Plan Operations section a commitment to implement Phase I and Phase II components of the Norwest dust control plan as described in App.X.C-3. (2) Include in the text of the Operations plan a description of the supporting measures to be employed in Phase II. (3) Determine a method to objectively measure of the success of Phase I dust control strategies as a means of determining when Phase II will be implemented.

AIR POLLUTION CONTROL PLAN

Regulatory Reference: 30 CFR 784.26, 817.95; R645-301-244, -301-420.

Analysis:

The facility will include a screening/crusher building, and a 10,000 ton processed coal stockpile along with associated conveyors. The facility will handle a capacity of approximately 1,300,000 tons of coal per year (page 17b, Chapter II).

Appendix X.C-2 contains the Air Quality Approval Order (AO) from the Division of Air Quality dated August 5, 2002. The AO itemizes following at the 4th East portal site.

- The production limit of 1,300,000 tons/yr should not be exceeded
- The ROM surge pile may contain 1500 tons maximum.
- The maximum time period of operation for the 425 hp diesel generator should be 300 hours of operation /12 mo period (using #2 diesel fuel oil).
- Visible emissions from conveyor transfer points should not exceed 10% opacity and emissions from all other sources should not exceed 20% opacity. Observations of opacity are to be made in accordance with 40 CFR 60.11 (b) and 40 CFR 60, Appendix A, Method 9.

Chapter II, page 25 includes a statement that "opacity readings as required by the modified approval order." The air quality approval order specifies air monitoring of existing facilities and vehicles to maintain 20% or less opacity. The AO requires that a certified individual take the opacity readings. Attached to the cover letter are the opacity readings taken by the Permittee on two separate occasions in June and July of 2003 of the conveyor transfer points. Fugitive dust from the coal pile itself was not evaluated. At the time of the readings, the wind was between 0-2 nauts and there was no exceedence of the opacity requirement.

Previously, there was no certified individual located at the mine site who could continually monitor the site for opacity and implement the dust control strategies immediately when an exceedence of opacity was noted. It would behoove the Permittee to designate an individual who will be certified in Method 9, stationed at the Emery Mine, and responsible for on-going monitoring of opacity.

The Permittee submitted a Notice of Intent (NOI) to modify the AO dated November 5, 2003 to the DAQ. (A copy was received by the Division on November 6, 2003). The DAQ has evaluated the new crusher installation and requested further information on the dust control plan (meeting between DOGM and DAQ 12/04/2003).

Findings:

The information provided meets the minimum requirements for Air Pollution Control Plan.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Topsoil Removal and Storage

Previously Conducted Removal and Storage Activities:

The location and method of topsoil salvage described in Chap IV, page 7 and Plate III-1. Seeding with two different seed mixes and irrigation of the mix containing some warm season species is described on pages 7 and 7a of Chapter IV.

Chapter II, page 17a indicates that the topsoil storage pile and associated berms holds 7,900 cu yds of topsoil. The berms along the north and west sides of the excavated material pile and the west side of the disturbed area (Figure IV-16) contain 1,400 cu yds of topsoil (page 17a Chap II). (The soil profile between the berm and the west fenceline is undisturbed. However, the soil surface was affected by vehicle traffic during construction of the west fence.)

Supplemental topsoil handling after topsoil pile construction is also described on page IV-7 and 7a and Figure IV-15. As described on page IV-7, the western outside edge of the topsoil stockpile berm was reseeded on August 19, 2003. Not described in the application is the seeding of the south fence line of the disturbed area (disturbed by vehicle traffic during the installation of a transmission line). This area was broadcast seeded and hydromulched (personal observation and communication with James Byar on 8/21/03, see also images E_N03-38-1-1jb). The seed mix used is outlined on page VIII-20 Section VIII.C.3 of the MRP, except that yellow sweet clover was omitted from the mix. A copy of the seed tag for the August 19, 2003 seeding was received from the Permittee on September 22, 2003. This same mix was used on the 4th East portal topsoil stockpile southern berm.

Proposed Activites:

Chapter III Reclamation Plan, page 21 indicates that an average of nine inches topsoil (or 1200 yards) will be removed from the additional acre to be disturbed east of the existing permit

boundary fenceline (Plate III-1). The soil map in Appendix VII-4 supports this evaluation, although an average of ten inches of soil over rock may be available, bringing the volume to 1344 cu yds. Since every yard of topsoil is needed, the Permittee has committed to employing a qualified soils specialist to direct the topsoil salvage operation (Chap IV, pg 7a).

Chapter IV page 7a describes a process of harvesting existing cryptogams from the surface of the 1.0 acres before disturbance and before topsoil salvage. The cryptogams will be manually collected and placed on the topsoil stockpile and the location(s) marked and recorded for future evaluation. The existing soil berm (seeded August 19, 2003) will be crowded into the topsoil stockpile. Soil between the water tank and the topsoil stockpile will be picked up and placed in the topsoil stockpile. Soil salvaged from the 1.0 acre disturbance will be used to rebuild the west topsoil berm. The affected areas of the topsoil stockpile and the berm will be gouged, mulched and seeded. (Consequently the information on Chap IV page 7 concerning the topsoil stockpile berm seeding on August 19, 2003 will be superceded.)

The Permittee is reminded that the soils that are currently on the eastern half of the south topsoil berm must not be disturbed as they are part of an ongoing reclamation treatment study (R645-301-234.240).

Findings:

The information provided meets the minimum requirements for Topsoil and Subsoil Salvage.

SUPPORT FACILITIES AND UTILITY INSTALLATIONS

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

Analysis:

Strategies for dust control at the Emery Mine site were approved in concept during a meeting between the Division and Consol Energy on August 26, 2003, and the Norwest Inc. dust control plan was included in the pending N03-39-1-1 Abatement plan as Appendix X.C-3 (reviewed under Tasks #1692 and #1762). Included with the Norwest Inc. dust control strategy in App X.C-3 are the following recommendations:

1. The mine superintendent will implement the dust control plan. As the stockpile manager, he will be responsible for maintenance and repair of the equipment, as well as wind data collection. The supervisor would direct on–site training to familiarize personnel with the dust control strategies.

- 2. A monitoring and maintenance plan (Appendix I of App X.C-3), including a training program and weekly repair logs for all components of the dust control plan.
- 3. A means of providing a working demonstration of the dust controls during inspections (App X.C-3, pp 9 & 23).
- 4. The three water spray points to be implemented in Phase I (App X.C-3, p17 and Fig 10) using Benetech technology for ease of conversion to Benetech dust suppressant system in Phase II.

The following concerns remain to be addressed by the Permittee:

- 1. Designate a person responsible for wind data collection and maintenance.
- 2. Determine a means to objectively measure of the success of Phase I dust control strategies as a means of determining when Phase II will be implemented.
- 3. Provide in the Mining and Reclamation Plan Operations section a commitment to implement Phase I and Phase II components of the Norwest dust control plan as described in Appendix X.C-3.

Findings:

The information provided does not indicate that the dust control/support facilities will be constructed or implemented using the best technology available. Prior to approval, the Permittee must provide the following, in accordance with:

R645-301-526.220, R645-301-526.221, R645-301-526.222, The plan must include the following additions: (1) Designate someone responsible for wind data collection and maintenance of the weather station. (2) Determine a means to objectively measure of the success of Phase I dust control strategies as a means of determining when Phase II will be implemented. (3) Provide in the Mining and Reclamation Plan Operations section a commitment to implement Phase I and Phase II components of the Norwest dust control plan as described in App.X.C-3.

SIGNS AND MARKERS

Regulatory Reference: 30 CFR Sec. 817.11; R645-301-521.

Analysis:

The plan indicates that all topsoil stored in berms will be clearly marked (Chap IV, page 7a).

Findings:

The information provided meets the requirements of the Regulations.

RECLAMATION PLAN

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

The post mining land use will be grazing/wildlife habitat as described in Chapter X., Part D. Section 5.

Findings:

The information provided meets the requirements of the Regulations.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

General

Plate III-5 4 East Portal Site Pre & Postmining Topography Plan View includes the additional 1.5 acre disturbed area.

The Worksheet in Appendix IV.B.1 indicates that the area of topsoil salvage will have topsoil replaced and the surface gouged to a depth of 6 inches to a foot (page A-12). The area where topsoil was stored in place will be ripped to a depth of 1.5 feet on two foot centers (page A-9). This will likely promote areas of increased erosion along the ripped zones without

alleviating compaction between the ripped zones. The Division will require that the entire site is gouged to a six inch to a foot depth.

Chapter III, page 21 indicates that the topsoiled surface will be roughened (gouged). Although this does not clearly state that **the entire site** will be roughened (gouged), the Worksheet 4B Earthwork Quantity in Appendix IV-B.1 indicates roughening of 16 acres of retopsoil area. (Sixteen acres is the entire disturbed area at the present time.) Worksheet 10 Productivity for Hydraulic Excavator Use in Appendix IV-B.1 has been adjusted accordingly.

Findings:

The information provided meets the requirements of the Regulations.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

Redistribution

Chapter III Reclamation Plan, page 21 describes the manual replacement of cryptogams over the surface at reclamation, as a final step.

Page A-2a of Appendix VI.B.1 also indicates that cryptogams will be salvaged from the topsoil stockpile and manually replaced in gouges of the reclaimed site. Locations will be marked for record keeping.

Findings:

The information provided meets the requirements of the Regulations.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

Page 4b of Chapter III describes the interim reclamation measures that were undertaken in conjunction with the abatement of N03-38-1-1 (August 5, 2003), interim seeding and hydromulching of the 1.0 acre area now proposed for use as a new haul route.

Mention should also be made of the area disturbed by vehicle traffic during the installation of the transmission lines (along the south fence line) seeded on August 19, 2003; the area disturbed by vehicle traffic during construction of the west fence line (hydromulched only during the fall of 2002); and the area along the southeast fence line affected by vehicle traffic during installation of the transmission lines and repairs to transmission lines (hydromulched only during the fall of 2002).

Findings:

The information provided does not meet the requirements for clear and concise reporting of interim reclamation. Prior to approval, the Permittee must provide the following, in accordance with:

R645-301-244.200, the plan must indicate measures taken to date to stabilize areas along the fence lines affected by vehicle traffic. i.e. Mention the area disturbed by vehicle traffic during the installation of the transmission lines (along the south fence line) seeded on August 19, 2003; the area disturbed by vehicle traffic during construction of the west fence line (hydromulched only during the fall of 2002); and the area along the southeast fence line affected by vehicle traffic during installation of the transmission lines and repairs to transmission lines (hydromulched only during the fall of 2002).

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seg.

Analysis:

Determination of Bond Amount

The reclamation plan for the 4th East portal reflects 16 acres of gouging in worksheets 4b, 10 and 17 of Appendix IV.B.1.

Findings:

The information provided meets the requirements of the Regulations.

RECOMMENDATIONS:

The submittal is not recommended for approval at this time.

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